AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A lead frame connector for connecting an optical sub-assembly to a printed circuit board of an optical transceiver module, comprising:

an electrically insulating casing having an isolating hole formed therein; and

a plurality of conductors that are electrically isolated one from another by the electrically insulating casing, the plurality of conductors forming:

a plurality of electrical contacts that correspond to and can be connected to leads of the optical sub-assembly; and

a plurality of leads that correspond to and can be connected to conductive structures on the printed circuit board; and

wherein the plurality of conductors are exposed at the isolating hole.

2. (Original) A lead frame connector as defined in claim 1, wherein the optical sub-assembly is a transmitter optical sub-assembly.

3. (Original) A lead frame connector as defined in claim 2, wherein the plurality of electrical contacts consists of four electrical contacts.

4. (Original) A lead frame connector as defined in claim 1, wherein the optical sub-assembly is a receiver optical sub-assembly.

5. (Original) A lead frame connector as defined in claim 4, wherein the plurality of electrical contacts consists of five electrical contacts.

6. (Original) A lead frame connector as defined in claim 1, wherein each of the plurality of electrical contacts has a hole formed therethrough, wherein the hole is configured to receive the corresponding lead of the optical sub-assembly.

7. (Currently Amended) A lead frame connector as defined in claim 1, wherein:

each of the plurality of conductors has a shape, a position and dimensions that are selected according to particular RF conditions; and

the electrically insulating casing has a dielectric constant that is selected according to the particular RF conditions. ~~wherein an isolating hole is formed through the electrically insulating casing, wherein the plurality of conductors are exposed at the isolating hole and are electrically separated one from another by the isolating hole.~~

8. (Original) A lead frame connector as defined in claim 1, wherein the conductors are bent at segments thereof between the plurality of electrical contacts and the plurality of leads.

9. (Original) A lead frame connector as defined in claim 1, wherein the electrically insulating casing is insert injection molded over a portion of the plurality of conductors.

10. (Currently Amended) A lead frame connector for connecting an optical sub-assembly to a printed circuit board of an optical transceiver module, comprising:

an electrically insulating casing forming a body that defines a plane, the electrically insulating casing having an isolating hole formed therein; and

a plurality of conductors that are exposed at the isolating hole and are electrically isolated one from another by the electrically insulating casing, the plurality of conductors forming:

a plurality of electrical contacts exposed through the electrically insulating casing, the electrical contacts being arrayed in a configuration that is substantially parallel to the plane defined by the casing, wherein the electrical contacts correspond to and can be connected to leads of the optical sub-assembly; and

a plurality of leads that correspond to and can be connected to conductive structures on the printed circuit board, wherein each of the leads extends from the casing in a direction that is not parallel with the plane defined by the casing.

11. (New) A method for forming a lead frame connector for connecting an optical sub-assembly to a printed circuit board of an optical transceiver module, the method comprising:

stamping a plurality of conductor structure in a ribbon of conductive material, wherein each conductor structure is based on particular RF conditions and each conductor structure has a plurality of conductors;

performing an injection molding process on each stamped conductor structure to form an insulating casing about at least a portion of each conductor structure;

manipulating conductors of each conductor structure to achieve a particular conductor configuration for each conductor structure;

dicing the ribbon into individual lead frame structures, wherein each lead frame structure includes an insulating casing about at least a portion of a conductor structure; and

punching an isolating hole in each insulating casing to remove a portion of each conductor structure such that the plurality of conductors are electrically isolated from each other.